

## **Appendix A.9**

**Harmonic Data for Chargers** 



## **Harmonic Diversity Summary for Chargers**

The phasor diagrams shown in Fig. 4 present the harmonic data for the chargers at the beginning of charging in a phasor diagram format as explained earlier for the appliances. The diversity effects arising due to the chargers is shown in Fig. 5 with the net current phasor arising due to all the chargers.

Figs. 6 and 7 illustrate the harmonic data at the end of charging in a phasor diagram data in a similar manner to the beginning of charging.

## Phasor plots at beginning of charge

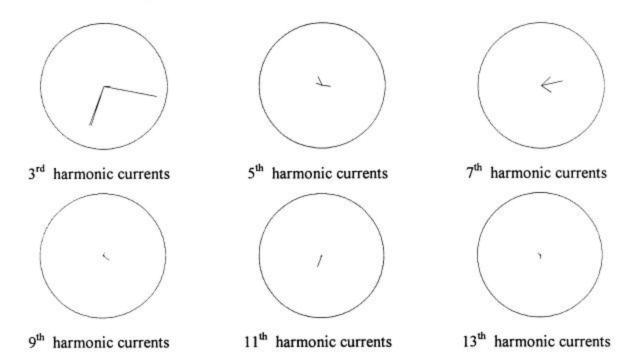
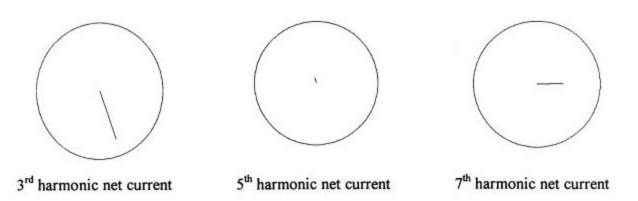


Figure 4: Phasor diagram of harmonic currents for all chargers on 1.25 A circles (Beginning of charge)



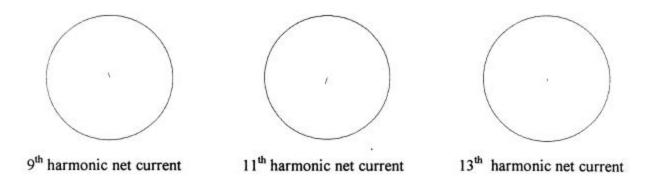


Figure 5: Phasor sum of harmonic currents for all chargers on 2.5 A circles (Beginning of charge)

## Phasor plots at end of charging

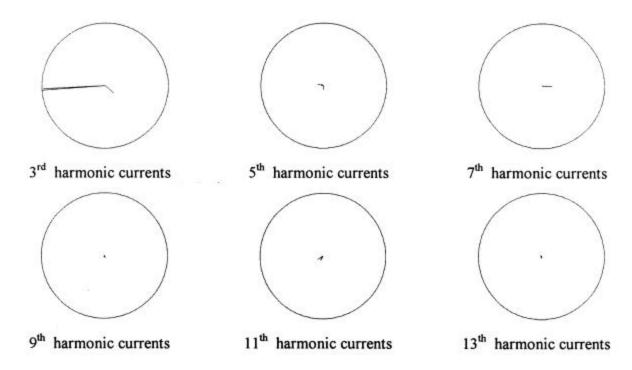


Figure 6: Phasor diagram of harmonic currents for all chargers on 1.25 A circles (End of charge)

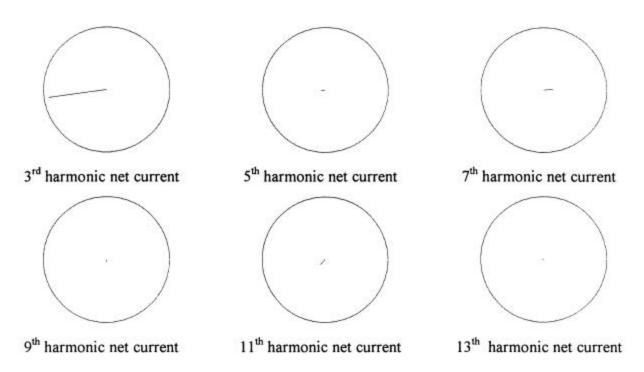


Figure 7: Phasor sum of harmonic currents for all chargers on 2.5 A circles (End of charge)